

## Safety Data Sheet

# TPP Crosslinking Agent

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### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** TPP Crosslinking Agent  
**Product number:** CL20201  
**Brand:** CELLINK  
**General use:** Crosslinker of amine-containing bioinks for 3D bioprinting, cell encapsulation, tissue engineering, regenerative medicine, biomedical devices and drug delivery. For research use only, not for human use.

**Company address:**

CELLINK LLC  
100 Franklin St.  
Boston, MA 02110  
USA

CELLINK AB  
Arvid Wallgrens backe 20  
SE41346 Göteborg  
Sweden

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**Emergency telephone number:**

US:  
+1(833) 235-5465

EU:  
+46 31-128-700

support@cellink.com  
www.cellink.com

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### 2. HAZARDS IDENTIFICATION

**Potential health effects:** The active ingredient sodium tripolyphosphate in its dry form causes:

Skin irritation (H315)  
Serious eye irritation (H319)  
Respiratory irritation (H335)

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS#	EC No.	EC Class	Composition
Sodium tripolyphosphate	7758-29-4	231-838-7	H315*, H319*, H335*	0.5%
D-mannitol	69-65-8	200-711-8	Not classified as hazardous	
HEPES buffer solution	7365-45-9	230-907-9	Not classified as hazardous	

\*For dry sodium tripolyphosphate powder.

### 4. FIRST AID MEASURES

**In case of eye contact:** Flush eyes with water as a precaution.

**In case of skin contact:** Wash with soap and plenty of water.

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

**If inhaled:** If breathed in, move person into fresh air. If any breathing difficulty or discomfort occurs and persist, obtain medical attention.

**Notes to medical doctor:** This product has low oral and inhalation toxicity. It is not skin sensitizer and is non-irritating to the skin and eyes.

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### 5. FIRE FIGHTING MEASURES

**Extinguishing media:** No data available.

**Fire/explosion hazards:** Not combustible.

**Firefighting procedures:** No data available.

**Flammable limits:** No data available.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:** Avoid dust formation. Avoid breathing vapors, mist or gas.

**Environmental precautions:** Do not let product enter drains.

**Methods and materials for containment and cleaning up:** Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

**Precautions for safe handling:** Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Conditions for safe storage:** Keep container tightly closed between 4°C and 25°C.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:** N/A

### Personal protection equipment

**Eyes and face:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Respiratory:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Protective clothing:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Gloves:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES.

**Appearance:** Transparent liquid

**Upper/lower flammability:** N/A

**Odor:** Odorless

**Vapor pressure:** N/A

**Odor threshold:** N/A

**Vapor density:** N/A

**pH:** 7.5

<b>Relative density:</b>	1 g/mL
<b>Melting point:</b>	N/A
<b>Solubility in water:</b>	No data available.
<b>Boiling point:</b>	No data available.
<b>Flash point:</b>	N/A
<b>Evaporation rate:</b>	No data available.
<b>Flammability:</b>	N/A
<b>Partition coefficient:</b>	N/A
<b>Autoignition temp:</b>	No data available.
<b>Decomposition temp:</b>	N/A
<b>Viscosity:</b>	N/A

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## 10. STABILITY AND REACTIVITY

<b>Conditions to avoid:</b>	Freezing
<b>Reactivity:</b>	No data available
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Incompatible materials:</b>	Strong oxidizing agents
<b>Hazardous decomposition products:</b>	No data available.

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity:

Oral LD50: No data available.

Inhalation: No data available.

Dermal: No data available.

**Skin corrosion/irritation:** No data available.

**Serious eye damage/eye irritation:** No data available.

**Germ cell mutagenicity:** No data available.

**Carcinogenicity:**

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as Aldrich - W201502 Page 5 of 6 probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** No data available

**Specific target organ toxicity - single exposure:** No data available

**Specific target organ toxicity - repeated exposure:** No data available

**Aspiration hazard:** No data available

**Additional Information:** No data available

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**12. ECOLOGICAL INFORMATION**

**Toxicity:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

**Mobility in soil:** No data available.

**Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects:** No data available.

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**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods:**

**Product:** Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging:** Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

**U.S. Department of Transportation (DOT):** Not dangerous goods

**International Maritime Dangerous Goods (IMDG):** Not dangerous goods

**ADR – European agreement concerning the international carriage of dangerous goods by road:**

**Additional information:** Not regulated.

**Other information:** N/A

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## 15. REGULATORY INFORMATION

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** No SARA Hazards

**Massachusetts Right to Know Components:**

Sodium tripolyphosphate

**Pennsylvania Right to Know Components:**

Sodium tripolyphosphate

**New Jersey Right to Know Components:**

Sodium tripolyphosphate

**California Prop. 65 Components:**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## 16. OTHER INFORMATION

Rating for pure sodium tripolyphosphate powder:

**HMIS Rating**

Health hazard: 1

Chronic Health Hazard: 0

Flammability: 0

Physical Hazard: 0

**NFPA Rating**

Health hazard: 1

Fire Hazard: 0

Reactivity Hazard: 0